# The Central African Journal of Medicine



Editor:
MICHAEL GELFAND, C.B.E., M.D., F.R.C.P.

Assistant Editor:
JOSEPH RITCHKEN, M.D.

Volume Eighteen JANUARY - DECEMBER

# Suicides in Rhodesia

D. A. W. RITTEY and

#### W. M. CASTLE

Department of Social and Preventive Medicine, University of Rhodesia.

#### Introduction

Suicide rates are often used as one index of community mental health and may be of use in planning mental health services.

### Метнор

All suicides in Rhodesia, whether there is an inquest or a police inquiry, are reported to the office of the Attorney-General, and our results are obtained from these returns. In the case of the Africans the returns for a complete year (June 1969-May 1970), taken retrospectively from the time of the study gave an annual total of 271 suicides. To produce a comparably large figure for the Europeans the returns over the five-year period (June 1965-May 1970) were studied. This gives a five-year total of 165 suicides, an annual average of 33. During this five-year period there was one Indian suicide.

#### RESULTS

Table I shows the Results and Crude Rates based on the 1969 census returns. In each ethnic group there were fewer female than male suicides. It is, of course, erroneous to use crude rates for comparison which is only possible after direct standardisation of the two different population cructures. Studies of discrepancies and disparities within the same population are the most valuable, are comparisons of the rates within the same collation over a period of time.

Table I
CRUDE SUICIDE RATES PER 100,000

	Overall		Male		Female	
	No.	Rate	No.	Rate	No.	Rate
African	271	5.6	216	8.9	55	2.2
European	165	14.4	123	21.4	42	7.4
Asian/ Coloured	1	0.8	-	_	_	<del>-</del>

Table II shows the results by average ages. The Africans on average are younger when they take their lives, and in both groups the male average is less than the female.

Table II
AVERAGE AGE OF THE SUICIDES

,	Overall	Male	Female
African	46	39	42
European	40	45	47

Tables III and IV show the age/sex specific mortality rates in each group per 100,000. There was no suicide recorded in either race in the age groups below 10-14. The rates for both races and both sexes tend to reach a peak in the age groups in the seventh decade.

The results by month and grouped into trimesters are shown in Table V. No statistically significant differences emerge. The summer claimed least and the winter the most European suicide deaths, while the summer season seemed to be (so far as 1969 was concerned), the most common time for the African suicide.

Table III

AFRICAN

ANNUAL AGE/SEX SPECIFIC SUICIDE RATES
PER 100,000

(1969 CENSUS)

Age Group	M A	-	FEMALE		
	Suicides	Rate	Suicides	Rate	
10-14	8	2.4	0	0	
15-19	10	4.1	7	2.9	
. 20-24	11	6.2	5	2.3	
25-29.	21	12.8	8	4.5	
30-34	33	22.0	3	2.0	
35-39	31	23.0	4	3.2	
40-44	32	31.4	6	6.9	
45-49	18	18.4	. 3	3.7	
50-54	_ 18	25.7	0	. 0	
55-59	4	_ 7.9	4	11.7	
60-64	9	37.6	7	37.4	
65-69	6	21.8	1	4.8	
70+	9	34.4	7	28.8	
Unknown	6		0		
Total	216	8.9	55	2.2	

(Overall Crude Rate = 5.6)

The different suicide methods shown in Table VI highlight very striking differences both between the races and between the sexes in the Europeans. Ninety-four per cent. of African suicides hanged themselves as opposed to four per cent. of the Europeans. Of the European male group, 52 per cent. shot themselves as opposed to 12 per cent. of the European females. Sixty-four per cent. of European female suicides poisoned themselves. Only three Africans poisoned themselves. Barbiturate poisoning was the method of choice with 65 per cent. of all European self-poisonings (Table VII).

#### DISCUSSION

National rates are notoriously inaccurate for many reasons and, while the suicide incidence is

Table IV
EUROPEAN
ANNUAL AGE/SEX SPECIFIC SUICIDE RATES
PER 100,000
(1969 CENSUS)

Age Group	M A I Suicides 5 Years	ES Rate	FEM A Suicides 5 Years	A L E S Rate
10-14	1	1.6	0 .	. 0
15-19	2	3.9	2	4.0
20-24	6	13.5	2	4.7
25-29	10	25.0	3	7.8
30-34	12	33.9	3	8.6
35-39	8	21.0	4	10.6
40-44	14	34.9	:- 5	12.8
45-49	14	33.2	2	5.0
50-54	13	38.5	3	9.0
55-59	14	47.0	5	17.3
60-64	10	45.8	6	26.1
65-69	7	58.1	2	14.2
70+	6	43.8	∮ 4	17.0
Unknown	6	_	1	
Total	123	21.4	42	7.4

(Overall Crude Rate = 14.4)

probably fairly accurately recorded in Rhodesia, errors are possible if the figures are taken from the wrong source. Our figures were taken from the records of the Attorney-General, where all inquests and police inquinies are reported. Suicides in Rhodesia are the subject of an inquiry or an inquest whenever they are known to occur and the addition of suicides outside municipal areas may account for the higher figure we found compared with the returns of the Registrar of Births and Deaths of Rhodesia which give very much lower figures, particularly in respect of African suicide.

The European rate of 14.4 per 100,000 is much higher than that for the African. Even after directly standardising the African population to make it comparable to the European, this standardised African rate is only 9.4 per 100,000. In this respect our experience compares closely with that of the United States of America and South Africa where the crude suicides rates of Negroes and Bantu are less than half of that of their white population.

Stengel (1967) quotes crude suicide rates per 100,000 for various countries in 1961. With reservations regarding different age and sex distribution of the populations, Belgium's crude rate of 14.6 per 100,000 is closest to the Rhodesian

 $\begin{tabular}{ll} $Table\ V$ \\ Suicides\ in\ Months\ and\ Grouped\ into \\ \hline Trimesters \end{tabular}$ 

Months	Africans	Europeans		
January February March April May June July August September October November December	31 21 34 (Summer season)  31 22 67 14  20 20 60 (Winter season)  21 23 67 23	17       9       9       12       18       11       16       22       17       11       13       10   35		
Unknown	3	0		
Total	271	165		

European experience, with many countries such as Hungary (25.4) being recorded as much higher and other countries such as the Republic of Ireland (3.2) much lower. National suicide statistics are unreliable for many reasons over and above the different age/sex patterns in the populations, such as varying and often inadequate methods of registration, unwillingness for religious reasons to record death as being due to suicide and the burden of proof required at an inquest on a suspected suicide. Thus no comparison between the Rhodesian figure and that in other countries is really valid. Even between the South African figure for Europeans in 1960 (14.1) and the Rhodesian European experience, such factors as urbanisation and high population density have to be taken into account along with immigration patterns and factors previously mentioned.

Table VI
METHOD OF COMMITTING SUICIDE

Method		frican Femal	e Total		pean Female	Total
Hanging	203	51	254	5	. 1	6
Shooting	0	0	0	64	5	69
Poisoning excluding Co.	2	1	3	16	27	43
Co-Poisoning	1	0	1	31	5	36
Violent Impact	2	1	3	3	4	7
Self Inflicted Wounds Others	3 5	1	4	2	0	2
Total	216	i -55	271	123	42 '	165

Table VII
POISONS USED

	<u> </u>				
Poisons		rican	European		
1 Olsons	Male	Female	Male	Female	
		_		<del> </del>	
Barbiturates	0	. 0	11	17	
Strychnine	0	0	0	. 4	
Cattle Dip	2	1	0	0	
Aspirin	0	o	1	2	
Mandrax	0	0	1	1	
Organic PO4	0	0	1	1	
Others	0	0	2	2	
Total	2	1	16	27	

Clearly climatic changes have no effect upon the suicide rates for the period under study and the analysis was carried out to confirm or deny popular belief that they do so.

Hendin (1969) comparing suicide rates in the U.S.A. population remarks that availability and familiarity are major factors in determining the frequency of the method used, noting that in Norway 15 per cent. of suicides are by drowning, whereas the world average is only 1-2 per cent., and in the Harlem tenements suicide by jumping is common. The same factors appear to apply to Rhodesia. Suicide by gunshot wound, 42 per cent. of the European total was the commonest method.

This compares with the findings in the United States report for the years 1950-1964 of 48 per cent. of all suicides being due to "firearms and explosions" (U.S. Department of Health, Education and Welfare, 1967). Europeans in Rhodesia often keep firearms for hunting, crop protection, sporting and similar purposes. Such a method is not employed by the African for whom firearms are not readily available and who is not familiar with their use. The African on the other hand, committed suicide most commonly by hanging, the materials and facilities for which are readily available. Jeffrey, M.W.D. (1952) reported the same choice of suicide method in Uganda.

The Annual Report of the Department of the Secretary for Law in S. Rhodesia for 1910, states:—

"It is noted in this connection (Inquests) the majority of this comparatively large number of suicides is confined to remote kraals. The native living under natural conditions appears to resort to suicide for the most trifling cause."

The same report for the year 1912 states:—

"There were 42 cases of suicide chiefly among natives who often take their own lives for causes scarcely intelligible to Europeans."

The method of hanging, in our experience is often unusual, in that the victim could, if he wished save himself merely by straightening his legs.

In respect of suicide due to poisoning, the three African deaths were due to the ingestion of arsenical cattle dip which is more readily available in rural areas, whereas most of the European poisoning suicides were due to the ingestion of barbiturates. Gassing by motor car exhaust fumes appears only once in the 271 African suicides reported, whereas 36 of the 165 European suicides used that agent, a reflection of the distribution of motor cars among the two populations, perhaps also of a knowledge of the chemical constituents of motor car exhaust fumes.

#### SUMMARY

The returns of the Rhodesian Attorney-General are analysed retrospectively over a one-year period for Africans (271 cases) and over a five-year period for Europeans (165 cases).

Highlighted are the crude suicide rates, standardised rates, age and sex differences, and the time of year. The methods chosen to commit suicide are markedly different between the two ethnic groups.

# Acknowledgments

The authors would particularly like to thank Mr. B. J. Tracey, Q.C., Director of Public Prosecutions, for kindly advice and permission to obtain data from his files.

# REFERENCES

HENDIN, H. (1969). Arch. Gen. Psychiat. 21, 407. JEFFREYS, M. D. W. (1952). African Studies, 3, 118. SECRETARY FOR LAW S.R. ANNUAL REPORT

———(1910) Govt. Printers & Stationers. ———(1912) Govt. Printers & Stationers.

STENGEL, E. (1967). Suicide and Attempted Suicide, p. 18, Penguin Books Ltd., Harmondsworth, Middlesex, Eng. U.S. DEPARTMENT OF HEATLH EDUCATION & WELFARE (1967). Suicide in the United States, 20, 54.



This work is licensed under a Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see: <a href="http://creativecommons.org/licenses/by-nc-nd/3.0/">http://creativecommons.org/licenses/by-nc-nd/3.0/</a>

